

REMARKS

Claims 1 and 3-24 are in the application.

Claims 1, 4, 11 and 18 were amended to include the word “predetermined.”

§ 103 Rejections

In the Office Action, claims 4-24 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 6,324,184 to Hou et al., hereinafter “Hou,” and in view of U.S. Patent No. 6,426,943 to Spinney et al., hereinafter “Spinney.” In addition, claims 1 and 3 were rejected under 35 U.S.C. § 103 as being unpatentable over Hou in view of Spinney and U.S. Patent 6,101,176 to Honkasalo et al., hereinafter “Honkasalo.”

Representative claim 4 recites in relevant part:

4. A method for providing multiple grades of service in a demand access wireless communication system, comprising:

identifying a priority level of a user requesting allocation of bandwidth for transmitting data information to a base station depending on whether a previous historical usage of resources by that user exceeds a *predetermined threshold*, such that:

if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned,...

Applicant respectfully submits that neither Hou, Spinney nor Honkasalo taken either singly or in combination teach or suggest Applicants claimed *if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned* wherein the threshold is a *predetermined threshold*.

In the Office Action the Examiner notes that Hou does not expressly disclose assigning a user a lower priority level for transmitting data information if the previous historical usage by the user is higher than a threshold. The Applicant agrees.

Also in the Office Action, the Examiner notes that Spinney teaches (1) tracking a number bytes processed by the switch for a particular data flow, (2) determining if the number of bytes processed for the data flow indicates the flow is a bulk data transfer and (3) if so, placing packets associated with the data flow on a lower priority queue. Further, the Examiner believes that Hou at column 11, lines 37-64 provides a proper motivation/suggestion to modify Hou's apparatus as taught by Spinney "to assign a user a lower priority level for transmitting data if historical usage by the user is higher than a threshold." The Applicant respectfully disagrees.

First, Hou teaches allocating bandwidth to a user based on a user's usage of bandwidth relative to others in the network and not based on whether a user's historical usage of bandwidth exceeds or is less than a certain predetermined threshold. At column 11, lines 37-64, Hou teaches allocating bandwidth to a user in a data network on the basis of the user's historical bandwidth usage relative to the bandwidth usage of other users in the data network. Specifically, Hou teaches (1) maintaining a historical record of bandwidth usage for each user and (2) granting a higher priority with regards to allocating bandwidth to users who have a bandwidth usage level that is low relative to the bandwidth usage levels of other users in the network. In Hou, "low" is defined by and is dependent on the bandwidth usage levels of other users. Thus, "low" is relative and may vary as the bandwidth usage levels of the users vary.

The Applicant, on the other hand, claims (1) determining a historical usage level of bandwidth by a user and (2) if that usage level exceeds a predetermined threshold, granting the user a lower priority level for transmitting future data. Unlike Hou, the Applicant's claimed invention compares a user's historical bandwidth usage level to a predetermined threshold value which does not vary based on the bandwidth usage level of others in the network.

Second, with regards to Spinney, at column 28, line 48 through column 29, line 29 Spinney notes that each flow is associated with a policy record which holds various data parameters associated with the flow including a threshold value, a starting priority and an ending priority. The starting priority is used to determine which queue initially handles the data flow.

The ending priority is used to determine which queue handles the data flow after it is determined the data flow is a bulk transfer. The threshold is used to determine if the data flow qualifies as a bulk transfer. According to Spinney, at the onset, a data flow is assigned to a queue specified by the starting priority. If the number of bytes transferred for the data flow exceeds the threshold, the data flow qualifies as a bulk transfer and is moved to the queue specified by the ending priority. Thus, at best, Spinney teaches moving a data flow from one queue to another based on whether or not the data flow is a bulk data transfer.

In contrast, the Applicant's claimed invention is directed to (1) identifying a priority level for a user based on a historical usage of resources by the user and (2) assigning resources (channels) for use by the user based on the identified priority level. The priority level is identified by comparing the user's historical usage of resources to a threshold. If the usage level exceeds the threshold, the user is assigned a lower priority level which entitles the user to the use of fewer channels than otherwise allowed when a higher priority level is assigned. Likewise, if the usage level is below the threshold, the user is assigned a higher priority which entitles the user to the use of more channels than otherwise allowed when a lower priority level is assigned. In sum, the Applicant's claimed invention is directed to identifying a priority level which ultimately determines a number of channels that may be allocated to the user for transferring data. This is quite different than moving a user from one queue to another based on the amount of data the user has transferred, as taught by Spinney.

Regarding Honkasalo, as noted in the Applicant's prior response, Honkasalo is silent with regards to the Applicant's claimed *if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned.*

Because of the absence of *if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a*

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higher priority level is assigned in Hou, Spinney and Honkasalo, the Applicant respectfully submits that Hou, Spinney and Honkasalo taken either individually or in combination do not render the Applicant's claims 1 and 3-24 obvious under 35 U.S.C. § 103. Therefore, the Applicant respectfully requests that the rejections of these claims be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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